

Application Serial No: 10/524,700
Attorney Docket No. 10191/3804
Reply to Final Office Action of September 16, 2009

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS:

1-6. (Canceled).

7. (Currently Amended) A method for automatically initiating an emergency braking sequence, comprising:

performing a preliminary warning braking in a motor vehicle;

increasing a braking force during the preliminary warning braking until at least one wheel locks reaching[[es]] a maximum slip limit;

responsive to one of the braking force and a correlated state variable attaining a defined maximum value, ceasing the increasing of the braking force;

determining an attainable achievable vehicle deceleration during the preliminary warning braking, based on the maximum slip limit;

responsive to one of the braking force and [[a]] the correlated state variable attaining the defined maximum value, using a high estimated value of the attainable vehicle deceleration; [[and]]

varying a time of initiating an emergency braking as a function of the determined attainable achievable vehicle deceleration; and

correcting a provisional point in the time of initiating the emergency braking on the basis of the vehicle deceleration as given by a determined coefficient of friction.

8. (Previously Presented) The method as recited in Claim 7, further comprising:

decelerating at least one wheel of the motor vehicle to a slip limit during the preliminary warning braking.

9. (Canceled).

10. (Currently Amended) The method as recited in Claim 7, wherein[[::]] the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.

11. (Previously Presented) The method as recited in Claim 10, further comprising:
determining the coefficient of friction during preliminary warning braking; and
controlling, in accordance with the determined coefficient of friction, a braking pressure buildup when initiating the emergency braking.

12. (Currently Amended) A control unit, comprising:

a situation analyzer unit for determining a point in time for initiating a warning braking and a later, provisional point in time of initiating an emergency braking on the basis of a measured distance to an obstacle and a measured relative velocity of this obstacle, as well as on the basis of a provisional value of a vehicle deceleration; and

an ABS/ESP control unit for modulating a braking pressure as a function of a slip condition of a braked wheel while computing a coefficient of friction of a roadway, the coefficient of friction being determined during the warning braking, the ABS/ESP control unit reporting the determined coefficient of friction to the situation analyzer unit[[,]];

wherein the braking pressure during the warning braking has a defined maximum value so that the coefficient of friction will be set to a high estimated value if the braking pressure during the warning braking reaches the defined maximum value,

wherein[[::]] the situation analyzer unit corrects the provisional point in a time of initiating [[an]] the emergency braking on the basis of the vehicle deceleration as given by the determined coefficient of friction, and

wherein a braking force is increased during a preliminary warning braking until at least one wheel locks reaching a maximum slip limit.

13. (Previously Presented) The control unit as recited in Claim 12, wherein at least one wheel of the motor vehicle is decelerated to a slip limit during the preliminary warning braking.

14. (Previously Presented) The control unit as recited in Claim 12, wherein the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.

15. (Previously Presented) The control unit as recited in Claim 14, wherein the coefficient of friction is determined during preliminary warning braking, and in accordance with the determined coefficient of friction, a braking pressure buildup is controlled when initiating the emergency braking.

16. (Previously Presented) The control unit as recited in Claim 12, wherein at least one wheel of the motor vehicle is decelerated to a slip limit during the preliminary warning braking, wherein the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires, and wherein the coefficient of friction is determined during preliminary warning braking, and in accordance with the determined coefficient of friction, a braking pressure buildup is controlled when initiating the emergency braking.

17. (Currently Amended) The method as recited in Claim 7, further comprising:

decelerating at least one wheel of the motor vehicle to a slip limit during the preliminary warning braking;

determining the coefficient of friction during preliminary warning braking; and
controlling, in accordance with the determined coefficient of friction, a braking pressure buildup when initiating the emergency braking;

wherein[[::]] the attainable vehicle deceleration is represented by a parameter that indicates a coefficient of friction between a roadway and tires.